

STORMS AND WEATHER WARNINGS

WASHINGTON FORECAST DISTRICT

On the evening of the 4th, storm warnings were ordered from New London, Conn., to Eastport, Me., in connection with a disturbance of moderate intensity north of Lake Ontario. Strong winds occurred during the night and the warnings were lowered the following morning.

With a disturbance of slight intensity over northwestern Virginia on the morning of the 14th, storm warnings were ordered from Delaware Breakwater to Nantucket and small craft warnings south of Delaware Breakwater to Hatteras. Winds were fresh to strong from Atlantic City to Hatteras, but were only fresh north of Atlantic City.

On the morning of the 20th, when a disturbance of slight intensity was central 250 to 300 miles off the Virginia coast, storm warnings were hoisted between Boston and Block Island, and small craft warnings south of Block Island to Delaware Breakwater. On the evening of that date storm warnings were also ordered at Eastport, Me. Winds occurred substantially as indicated in the advices.

On the morning of the 23d, both in the State forecasts and radio bulletins, fresh to strong winds were forecast for the middle and north Atlantic coast and occurred as forecast. Severe squalls, at the time the wind shifted from southwest to northwest, were reported between Block Island and Sandy Hook.

Small craft warnings were advised on the 3d, 7th, 10th, 14th, 19th, and 20th for portions of the Atlantic coast from North Carolina northward.

On the 1st, warnings for heavy frost were issued for portions of New York, Pennsylvania, and the interior of New England, and occurred over northern New York and the interior of middle and northern New England.

On the 5th warnings for light frost were issued for portions of New York, Pennsylvania, western Massachusetts, and western Maryland, but temperatures were not quite low enough.—*R. H. Weightman.*

CHICAGO FORECAST DISTRICT

Storm warnings.—No general, severe disturbances affected the Great Lakes during the month and the number that developed enough energy to require warnings locally was small.

On the morning of the 4th storm warnings were ordered for Lake Huron and the lower lakes; verifying velocities were recorded at Port Huron and Erie.

On the night of the 9th storm warnings were ordered for Lakes Superior, Michigan and northern Huron and later these warnings were changed to small craft. Again on the night of the 21st small-craft warnings were displayed from Duluth to Munising on Superior and on northern Michigan and later extended to the lower lakes.

On the morning of the 24th storm warnings were issued for Lake Superior and northern Michigan; later in the day they were extended over southern Michigan and northern Huron and at night over southern Huron. On the morning of the 25th the small-craft warnings of the previous day were changed to storm warnings and all were lowered at night of that day.

Frost warnings.—Frost warnings were necessary from time to time during the first half of the month, but in all cases they were confined to the States of Minnesota, Michigan, and Wisconsin. In most cases the warnings specified light frost on low ground.—*C. A. Donnel.*

NEW ORLEANS FORECAST DISTRICT

Weather disturbances were generally of the summer type, with more than normal frequency of precipitation in the eastern and southern portions of the district, but were not attended by strong winds except where thunderstorms caused strong local winds for brief periods on a few days. No storm warnings were issued or required. Small craft warnings were displayed locally on the west coast of Texas on the 14th, 24th, and 29th.

Fair weather forecasts extending beyond the usual 36-hour period were issued on the 7th, 14th, and 21st and sent to addresses in Oklahoma for the benefit of alfalfa harvesters.—*R. A. Dyke.*

DENVER FORECAST DISTRICT

No warnings issued during the month.—*E. B. Gittings.*

SAN FRANCISCO FORECAST DISTRICT

The most remarkable feature pertaining to the meteorological work in this forecast district during June was the abnormal pressure situation over the northeast Pacific Ocean. The subpermanent high-pressure system, normally centered west of San Francisco and northeast of Hawaii, was at times displaced far to the west and south and at other times wholly absent, while for a large part of the month the trade-wind system was thoroughly disorganized. This condition attracted unusual attention because of the extraordinary interest which centered on weather and winds over the flying routes from this coast to Hawaii, coincident with the plans of several aviators to attempt the voyage during June, an interest which reached its climax with the flight of the Army plane from San Francisco to the islands on June 28–29, 1927. The great hazard in this flight, ranking second to the possibility of motor failure only, was involved in the possibility of not keeping the course to the objective, since a relatively slight deviation might mean disaster. Hence it was most essential to make proper allowance for probable drift, and the amount and direction of drift could only be gaged by an accurate foreknowledge of wind direction and velocity along the route. The unstable pressure conditions at sea were naturally the cause of some concern in view of the navigational uncertainties they implied.

Evidence of a change in this state of things was indicated on the weather charts of June 22 and notice was duly given that a resumption of normal conditions might be expected soon. Within three days thereafter a pressure reaction to normal had taken place and the trade winds were functioning as usual for the season.

For several days prior to the flight regular bulletins were issued describing conditions over the California-Hawaii flying routes and were given wide publicity by the various news-gathering agencies. The following, which was handed to Lieutenants Maitland and Hegenberger the evening before their departure, is a sample of the information the bulletins contained:

Very stable atmospheric conditions prevail over the California-Hawaii airway and conditions are ideal for flight from this coast to the islands. From the islands to the one hundred and fortieth meridian winds will be moderate to fresh easterly during the next 36 hours and the weather partly cloudy with showers near the islands; from the one hundred and fortieth to the one hundred and thirtieth meridians, moderate north and northeast and partly cloudy; from the one hundred and thirtieth meridian to the coast fresh northerly and clear, winds increasing to strong north of Point Conception.